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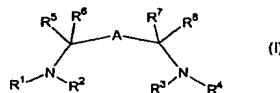
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(54) Title: CATALYSTS



(57) Abstract: Catalysts suitable for asymmetric hydrogenation reactions is described comprising the reaction product of a group (8) transition metal compound a chiral phosphine and a chiral diamine of formula (I) in which R¹, R² R³ or R⁴ are independently hydrogen, a saturated or unsaturated alkyl, or cycloalkyl group, an aryl group, a urethane or sulphonyl group and R⁵, R⁶, R⁷ or R⁸ are independently hydrogen, a saturated or unsaturated alkyl or cycloalkyl group, or an aryl group, at least one of R¹, R², R³ or R⁴ is hydrogen and A is a linking group comprising one or two substituted or unsubstituted carbon atoms.